

School Psychology and Early Education: Contributions of Boyd R. McCandless

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Summary: The writings of Boyd R. McCandless and his colleagues concerned with socialization, sex role development, research methodology, early education, and the relationship of his work to school psychology and early education are discussed. McCandless' interests were diverse, but revolved around a central and continuous concern for those who have less access to experiences which are basic to productive and self-fulfilling lives. There is much in a review of this person's life and work that is instructive for both the academician and the practitioner.

The contributions of Boyd R. McCandless to school psychology and early education are many and diverse. Some contributions are in the nature of his leadership among colleagues. Some contributions are in the summarization of, and extrapolation from, vast amounts of research literature in order to make the theory and empiricism of child development real and relevant to teachers and future psychologists—especially those teachers who were to work with the young and those psychologists who were to apply their knowledge to schools and schooling. Some contributions are methodological essays designed to help each of us be better scientists and practitioners. Some contributions were empirical forays into areas of continuing interest—preschool socialization, sex typing and sex role development, early childhood education, social class, and intellectual waste. We chose the last word, *waste*, only after careful thought. Boyd was more interested in the concept of the ability of all children to benefit from appropriate pedagogy than he was in the concept of retardation and its many interpretations—hereditary or environmental.

We have chosen to elaborate on a few of the many possible themes apparent in book, essay, and empirical research. We have tempered these by our personal knowledge of the man—his consistencies and his inconsistencies. We have chosen to arrange these themes in an order other than a chronology since our effort is to summarize major themes rather than to chronicle all of Professor McCandless' work. The socialization interests are discussed first, the sex-typing second, methodology third, research directed to applied problems fourth, and advice to school psychologists and early educators last.

SOCIALIZATION

Socialization remained a major interest for McCandless throughout his academic career. In his book *Children* (1967), he stated that "adequate socialization is perhaps the human being's most important single accomplishment. . . . The vast majority of

socially maladjusted people lead lives that are miserable for them and produce misery for their fellow men" (p. 425). McCandless goes on to point out:

In the United States today the frequency of such failures of individual socialization . . . is as high, or higher than, that of Western European, Eastern, or "primitive" cultures. The terrible urgency of these various problems plus the likelihood that failures of socialization originate in early childhood, is the reason why this book gives such diligent attention to the admittedly very incomplete data about socialization. (p. 425)

McCandless' strong interest in early socialization appeared not only in *Adolescents*, published in 1970, and *Children and Youth* (1973), co-authored with Ellis Evans, but also in his many published articles of original research, literature reviews, and contributions to edited volumes on child development. His contributions are significant, both in the design and execution of original research, but even more so in his integration of existing theory and knowledge. He possessed a remarkable ability to render complex and often inconsistent research findings into coherent and comprehensive discussions of child development, useful to experimental and applied psychologists alike, as well as parents and classroom teachers.

By his own admission (in fact, in a paper presented to Division 8 of APA in 1958), he considered himself a "rather eclectic social learning theorist" (p. 8). His strong interest in development during early childhood arose in part, no doubt, from his belief that "neither the innate evil nor the innate good of man is assumed; only his almost infinite malleability through learning" (McCandless, 1969, p. 425).

Although he had difficulty accepting much of psychoanalytic theory and research, McCandless felt that Erikson's (1956) eight psychosocial stages of man provided a basis for a theory of socialization:

The author has searched diligently for a model of social theory, and he believes he has found it in Erikson's (1956) eight psychosocial stages of man. Each of these stages is thought of by Erikson as a psychosocial crisis, which must be resolved before the next crisis can be undertaken and mastered. (McCandless, 1969, p. 792)

In his eclectic manner, McCandless augmented Erikson's stage theory with Ausubel's (1954) list of developmental tasks:

The list of developmental tasks supplied by Ausubel (1954) is a well-thought-out analysis of the socialization process. Ausubel fits well with Erikson, and anticipates current thinking in two ways: (1) Implicit in his formulation is a general goal of *competence* toward which adequate socialization should be directed. (2) He makes explicit, as few authors do, the point that frustration is neither good, bad, or indifferent, but simply omnipresent. (McCandless, 1969, p. 795)

A series of research studies done in collaboration with Helen Marshall (Marshall & McCandless, 1957a, 1957b; McCandless & Marshall, 1957a, 1957b) illustrates the depth and breadth of McCandless' contribution to understanding socialization in the preschool child. In their initial paper (Marshall & McCandless, 1957a), the authors report the development of a research instrument, a picture sociometric technique for use with preschool-aged children. Previous attempts by other investigators to develop this type instrument had failed for several reasons: (1) In attempts to validate previously designed measures, investigators had been unable to demonstrate that hypotheses of no relationship could be rejected for the observed social behaviors in their investigations (e.g., Biehler, 1954; Challman, 1932; Frankel, 1946). (2) Sociometric scores of preschool children had not proven to be stable over periods of time ranging from one to nine months (e.g., Bronfenbrenner, 1944; Lippitt, 1941; Witryol & Thompson, 1953).

Marshall and McCandless were convinced that friendships of a reasonably stable and discriminating nature existed among preschoolers and that the development of a method for studying such friendships in a precise and reliable manner was possible. The technique which they developed required each child to name or point to photographs of preferred playmates during an individual interview. The findings were compared to teacher judgments of friendships, and repeated measurements of both types were taken at intervals of about a week, for several weeks.

The result of this investigation was the satisfactory demonstration that children's sociometric choices of "closest friends" were consistently related to teacher judgments of children's choices, and that both children's sociometric scores and teachers' judgment scores were stable over 10- and 30-day intervals. The authors noted, however, that the moderate reliability obtained over these intervals suggests that both scores were subject to change with time.

Satisfied that they had developed a useful research tool, Marshall and McCandless undertook other investigations of preschool peer groups, using this sociometric technique. In one such study (Marshall & McCandless, 1957b), they challenged the commonly held belief that "a warm and satisfactory dependent relationship with adults (particularly parents) must exist before a child can be secure enough to gain emotional satisfaction from social competence by peers" (p. 413). Marshall and McCandless argued that adult dependency in preschool children could be due to the lack of techniques for relating to peers; and in fact, no empirical evidence existed to show that a relationship, positive or negative, existed between dependence on adults and social competence with peers.

Taking measures of peer interaction and adult-child interaction over several weeks, as well as eliciting various categories of sociometric choices from their preschool subjects, the authors found a negative relationship between dependence upon adults and measures of peer social acceptance. That is, in previously established play groups, dependence on adults accompanied relatively low social status and participation. In their observations of a newly formed group, however, Marshall and McCandless found that relations between dependency and peer social acceptance measures were neither consistent nor significant.

In a third study, McCandless and Marshall (1957a) examined differences in social acceptance and participation of preschool children in peer group activities. Specifically, they sought to answer: (1) Do preschool boys and girls differ in scores obtained on measures of social acceptance and participation? (2) Do sex differences exist in relationships between concurrent measures of social acceptance and participation? and (3) If such differences occur, are sex differences in social acceptance by peers affected by the progress of acquaintance in newly formed preschool groups? Three newly formed preschool groups were observed. Results showed that while girls had higher sociometric scores than boys, no sex differences were found in teacher judgments of social acceptance, observed social acceptance, degree of social interaction with peers, or degree of dependence on adults. Correlations between measures of peer social acceptance and participation were not affected by sex differences.

It is interesting to note that 12 years later, in his chapter "Childhood Socialization" in D. A. Goslin's (Ed.) *Handbook of Socialization Theory and Research* (McCandless, 1969), McCandless criticizes research investigating the influence of peer groups on socialization for the excessive use of the research instruments and techniques which he and Marshall developed and employed. He writes: "This peer group influence has been studied for the most part in a rather non-dynamic, sociometric way. The 'whys' have not been investigated, only the 'hows'" (p. 807). Actually, he and Marshall were

equally concerned with documenting the existence of social phenomena in preschool peer groups, as well as investigating reasons why such behaviors occurred.

Dependency and its many dimensions was an issue to which McCandless devoted a good deal of attention, both in theory and in research. In addition to the work done with Marshall investigating relationships between dependence on adults and social acceptance by peers in preschool play groups, McCandless undertook a study with Bilous and Bennett (1961) in which they examined further the question of why dependency interferes more with popularity for girls than for boys. These investigators used Heathers' (1955) distinction between emotional dependency, which is seeking comfort, affection, and support, and instrumental dependency, which is seeking objective help, as more refined definitions for the measurement of dependency. They collected teacher judgments, free play observations, and interview data from the mothers of the children observed. Their hypothesis that emotional dependency interfered with peer popularity was supported; rather surprisingly, though, they found that those children who frequently sought teacher intervention were not necessarily unpopular. They found no clear answer as to why emotional dependency tends to interfere with the popularity of girls, but not with boys.

In addition to his research concerning the nature of dependency and its effects on peer social behavior in preschool groups, McCandless used the concept of dependency to develop a partial model of socialization. In his chapter in Goslin's *Handbook of Socialization Theory and Research* (McCandless, 1969), McCandless develops a model of maturation based upon the changing dimensions of dependency. He writes:

Maturity in the sense in which it is discussed here, is obviously related to the dependency-independency dimension of human life. The child must change—must be developed?—from the totally dependent hedonistic infant who can do nothing for himself to the mature, reasonably self-sufficient organism who manages his own life and gratifies his own needs while leaving room for and making provisions for the needs of others. (p. 797)

McCandless was interested not only in how successful socialization came about, but also in how it could go wrong. The nature of prejudice and its development was another dimension of his interest in peer interaction and personality development in early childhood. In the early years of his career, McCandless was involved in a number of research projects which concerned the California *F*-scale and the authoritarian personality. One such study (Campbell & McCandless, 1951) involved a cross-validation of the Frankel-Brunswik, Levinson, and Sanford (1947) measure of ethnocentrism and authoritarian personality in conjunction with a series of measures of attitudes toward minority groups. The findings of Campbell and McCandless (1951) provided further evidence that a general factor existed among most, if not all, attitudes toward other minority groups besides Negroes and Jews. They also found that the *F*-scale measure of the authoritarian personality shows substantial relationship to all of the wide variety of measures of attitudes toward minority groups which were employed.

McCandless and Holloway (1955) investigated prejudice in children and its relationship to tolerance of ambiguity. The authors administered the Horowitz Faces Test as a measure of anti-Negro prejudice to a group of fourth and fifth graders in a midwestern public school. They then tested the relationship between racial prejudice and various other behaviors which they thought would characterize children who were intolerant of ambiguity. Their general hypothesis was that prejudiced children would be more intolerant of ambiguity than unprejudiced children, but the data failed to support this contention.

In a later paper, presented to Division 8 of APA in 1958, McCandless summarized and discussed child rearing practices as related to the development of the authoritarian personality. Although he was "unable to embrace that version of psychoanalytic theory which holds that the authoritarian personality springs full-blown from the anal psychosexual stage . . . due to the trauma of early and severe toilet training," McCandless, on the other hand, was "not unwilling to entertain sympathetically the notion that the severely toilet training mother combines with her toilet training methods a number of other child rearing practices that quite logically could make a child an authoritarian" (p. 8). He then proceeded to review a substantial body of literature which suggests that such a congeries of methods is probably the case. He concluded his talk by offering a number of testable hypotheses about the development of the authoritarian personality, many of which have been borne out in subsequent research by other authors (e.g., Baumrind, 1971).

Several years later McCandless, together with June Hoyt, conducted a research study to see if, in a situation where social mixing of races was common, preschool children would show any tendency toward ethnic cleavage (McCandless & Hoyt, 1961). In this instance, children of Oriental ethnic origin and Caucasian children at the University of Hawaii preschool were observed. Measures of the duration and the type of social interaction were taken during free play. Contrary to their expectations, McCandless and Hoyt found that the children differentially selected children of their own ethnic group as playmates. Surprised (and no doubt disappointed), McCandless argued that:

The subjective impressions of the senior author were that this cleavage was not due to prejudice in any conventional sense, but possibly to differential "comfort" due to more common backgrounds among the members of a given ethnic group. (p. 685)

In 1969 McCandless wrote, "These days, anxiety has become one of the most frequently, and probably loosely used motivational concepts" (p. 537). He added that, "One can predict that chronic anxiety will be higher in those who have been 'well reared'" (p. 546). The extent to which anxiety can interfere in an academic setting was a question addressed by McCandless, together with Alfred Castaneda and David Palermo.

These investigators developed the Castaneda, McCandless, and Palermo Manifest Anxiety Scale (1956), based upon the Taylor Manifest Anxiety Scale for adults. This instrument was then put to use in two research studies by the same authors. They examined the relationship between anxiety levels in children, as measured by their scale, and performance in a complex learning task. Their findings essentially supported the results of similar studies with adults, that high-anxious children made many more mistakes in a difficult learning situation than did low-anxious children, but that performance varied as a function of task difficulty (Castaneda, Palermo, & McCandless, 1956; Palermo, Castaneda, & McCandless, 1956).

Frustration is another variable which a child learns to handle through the manner in which he is socialized. McCandless took the view that:

Frustration can be defined in two ways: first, as failure to achieve a goal, or blockage (of a more temporary sort) of a person's efforts to achieve a goal; and second, as a drive induced by such failure or blockage. Frustration in the first sense cannot be considered either 'good' or 'bad,' but must be thought of as an inevitable and ubiquitous. (p. 573)

Otis and McCandless (1955) undertook a demonstration of the theory of frustration advocated by Dollard and his co-workers at Yale (Dollard, Doob, Miller, Mowrer, &

Sears, 1939). Preschool children were placed in a mild frustration situation. In response to this frustration, three different groups of children dropped the mannerly or dependent behaviors used to solve the frustrating situation, and in their place substituted aggressive attempts to solve the problem. These results directly supported the Yale theory, that aggression results from frustration and that behavior which does not reduce frustration will be weakened or extinguished.

In more recent years, McCandless' interest in socialization and early childhood education led him to investigate the problems of the disadvantaged child. Of particular interest were the noncognitive aspects of personality which predict academic success. With Herbert Richards (Richards & McCandless, 1972), he studied socialization dimensions among preschool slum children. Over a three-year period, data were gathered from more than 300 black and white 4- and 5-year olds attending prekindergarten in a poor, urban neighborhood of Atlanta. A variety of variables were examined by means of a series of reasonably reliable tests. Data collected included demographic information, peer popularity, sex-role preference, self-concept measures, intelligence, and teacher ratings. Richards and McCandless factor analyzed these results and determined five major factors in the socialization of inner-city children. These factors were verbal facility, coping with anxiety by withdrawal, coping with anxiety by aggression, alienation, and biological sex.

Several years later, McCandless, together with Ellison Pusser (Pusser & McCandless, 1974), conducted a follow-up study of these same children to examine their school achievement after four to five years. They found that it was possible to predict academic success of these inner-city children using the factors derived from the original study. That is, significant percentages of achievement variance were accounted for by four of the five factors (biological sex proved to have no statistical significance). McCandless and Pusser concluded that since the battery required only half an hour to administer, it was of substantial value for use as a diagnostic tool in determining the academic needs of inner-city children.

SEX ROLE DEVELOPMENT

As in the case of socialization, sex role development was a major interest for McCandless throughout his academic career and the area of his last major contributions. McCandless and Young (1966) outlined the development of an appropriate sex role. They suggested that the development of an appropriate sex role is a function of adequate home environment along with good parent-child relationships. The authors suggested special family conditions as prerequisites to development of an appropriate sex role. Primarily, McCandless and Young (1966) interpreted the literature to suggest that the parent of the same sex child is a socially acceptable model for that child as well as a source of love and positive reward. In addition, they concluded that an essential requirement for appropriate sex-role development is that the child's family be relatively free from conflict. While McCandless and Young suggested that it is necessary for the child to feel and be given love and affection from both parents, it is the same sex parent who projects an image of appropriate sex-type behavior.

The previously cited work of McCandless and Marshall (1957a, 1957b) which examined sex differences in social acceptance and participation of preschool children is relevant to this theme also. Recall that in social acceptance and participation McCandless and Marshall (1957a, 1957b) found that females scored higher on measures of peer acceptance and participation, except for hostile interaction, while males

had higher dependency scores. The authors suggested that females in our culture who are less popular feel freer than males to seek satisfaction from teachers through dependency, while males at this age have already learned that dependency on the part of males is not a desirable or "masculine" trait.

In contradiction to the stereotypic idea that females talk, while males act, Mallick and McCandless (1966) found no significant differences as a function of sex in behavioral expression of aggression toward frustrators. While the authors cautioned that cultural stereotypes of what is sex appropriate may not have been established in their 8- to 9-year-old population, nonetheless Mallick and McCandless found that girls do behave as aggressively as boys under permissive, nonthreatening situations.

In an examination of the development of sex-role adaptation, Thompson and McCandless (1970) suggested that the rate of developing sex-role preference may be faster among white males. The authors suggested that race is a significant factor in the IT Scale (ITSC) developed by Brown (1956). Using 72 lower class kindergarten children, 18 black boys, 18 white boys, 18 white girls, and 18 black girls, Thompson and McCandless hypothesized the following: (a) When males are compared with females, on the ITSC the males' mean scores for all three instructions will be significantly higher. This hypothesis came directly from Brown's (1956) results. Thompson and McCandless also hypothesized that as a function of racial difference, black males will score significantly more toward the feminine end of the scale than white males. It was also hypothesized that black females would score significantly more feminine than white females. Black males were predicted to score with more variability than white males. Based on Thomas' (1966) results it was hypothesized that there would not be a significant relation between sex-role preference as measured by the ITSC and sex-role adoption as measured by teacher ratings. Thompson and McCandless (1970) found that race was an important variable in the responses to the ITSC. The most significant finding was that lower class black males tended to show greater preference for the feminine role as measured under the semiprojective and objective instructions. The hypothesis that the development of sex-role preference precedes the development of sex-role adaptation was supported in this study since there were no significant differences among sex-role preference, sex-role adaptation, and sex-role adoption. Thompson and McCandless (1970) suggested that further research was necessary in order to determine types of models available to the children and especially those behaviors which are frequently reinforced by adults in lower class groups.

Stiles and McCandless (1969) reviewed research on child rearing and deprivation. The effects of father presence and father absence in the home were included. Initial research in this area during World War II indicated that male children were more affected by father absence than were females. Bach (1946) suggested that boys who were reared without fathers exhibited less aggressive behavior than boys whose fathers were present. Stiles and McCandless (1967) concluded that since, in our culture, the male is expected to become the competitive, dominant, and assertive individual, father absence may be detrimental to the development of proper (stereotypic) male role behavior. Stiles and McCandless indicated that father presence in the home does not assure that his influence will be positive. They supported this assumption by showing that a father who is passive, uninterested, or rejecting may represent a role model that the son may find confusing or "nebulous." The authors maintained that the son may find this type of behavior "unacceptable" and confusing. Stiles and McCandless did not conclude that father influence is the only factor which determines the son's future sex role.

Stiles and McCandless (1967) discussed achievement orientation as a function of sex within a social learning framework. The authors maintained that even before the child begins school he is an "astute" observer. He is said to internalize the behavior and interests of the same sexed parent. Stiles and McCandless believed that achievement orientation by both males and females before the age of 6 is deeply influenced by "potential approval" from others and himself. They suggested a change in achievement orientation in the elementary school years. Females are apt to seek help and emotional support and approval from others for their achievement behaviors, while males tend to want to become independent of others and strive for their own self-approval. This independence striving is a behavioral signal for differential treatment in the elementary school classroom. While males seek teacher and parental approval, they tend to serve "as critical evaluators" of the child's achievement, while females achieve in the elementary school to attain affection and approval from others. This suggested nurturant behaviors on the part of females in the early school years and task oriented or "doing" type of behaviors on the part of males.

McDavid and McCandless (1962) discussed "asocial" behavior as a function of juvenile delinquency. McDavid and McCandless concluded from Bandura and Walters (1959) that a major prerequisite for adolescent aggression lies in a disruption of a dependent relationship between the young child and the parent. While the authors did not state that the dependency is necessarily related to the same sex parent, the authors did maintain that a male's relationship with his father is crucial in adolescent aggression. Help from both parents, or other adults, is related to later tendencies toward or away from aggressive behavior.

McDavid and McCandless (1962) maintained that the inability to delay gratification is also related to juvenile delinquency. Supporting this hypothesis with several research studies, the authors maintained that father absence from the home may be related to the child's inability to seek reward or gratification when offered by a male adult.

In the same review, McDavid and McCandless (1962) defined conscience as "the acquisition of internal self-imposed standards of conduct as a device for controlling behavior" (p. 6). The authors suggested that at the beginning of life most of the child's control of his or her behavior or activity comes from his parents. Using a social learning model, the authors maintained that the child incorporates control of his behavior and activity from his parents. Since it was maintained that the young child is not able to cope with his complex environment, they justified direct parental control. They cautioned, however, that direct control is not "realistic" or necessary for the rest of the child's life. The authors suggested that the child must learn to control himself. They urged letting the child develop his own conscience, or his own self control, so that the child may decide what is "right" or "wrong" with his own behaviors. While "conscience" is related to delinquency, the authors also suggested that conscience is related to appropriate sex-role identification. The continuous search for interrelations among variables such as these was a major hallmark of McCandless' work.

McDavid and McCandless (1962) discussed identification as a variable in juvenile delinquency. It was their premise that the young child learns to behave like the same sexed parent and usually attempts to seek approval and affection from the same sexed parent. McDavid and McCandless maintained that as the young child learns to adopt the standards of his same sexed parents, adolescents learn to adopt standards of "older heroes" and follow this hero, although the hero's behavior may not be socially acceptable.

One of McCandless' later contributions to the area of sex differences was a review of the variables that he and Thompson (Thompson & McCandless, 1970) believed were important in the development of a homosexual orientation in males and females. They believed that there are still many "misconceptions and biases" concerning the area.

Thompson and McCandless (1970) concluded that homosexual and homosexuality are difficult constructs to define. They summarized three definitions of homosexuality—legal, social role, and psychological. The legal definition is "any two cohabiting males of legal age, according to the laws of the 50 United States, who are engaged in criminal activity and, thus, are subject to legal prosecution." According to the role definition, the individual is homosexual if he is labeled as homosexual by a social consensus. The third definition is psychological. Within the psychological definition there is the homosexual who views himself as homosexual, prefers sexual interactions with those of the same sex, and labels himself as homosexual. A second type of homosexual under this third definition does not seek personal, psychological, or physical intimacy with their same sex partners and are essentially those who deny their preferences. This group was categorized as "non-cognized" homosexuals, or "deniers."

Thompson and McCandless (1970) summarized seven variables apt to influence psychosexual development. First, glandular action influences the frequency and intensity of sexual behavior. How these glands direct sexual behavior was not discussed. Second, physical appearance is related to etiology of psychosexual style. The authors suggested that people are attracted to good-looking people. To be approached by an individual of the same sex may be pleasant to some, while unpleasant to others. Thus, if the person is not "repelled" by homosexuality, sexual interaction may result. The third variable is the fact that each sex has characteristics of the opposite sex, and therefore, to some extent everyone is bisexual. Fourth, males and females reared in certain areas are more apt to be exposed to both heterosexual and homosexual experiences. This, perhaps, explains the common homosexual experiences on the part of males and females who are confined to unisexual settings, such as boarding schools, prisons, or armed services. Fifth, the "gradual relaxation" of social stigmas and sanctions surrounding premarital sex for males and females was another suggested variable. Sixth, the attitude that homosexuality is avant-garde. Finally, the seventh variable is the complex of family dynamics and child rearing practices.

Thompson and McCandless (1970) devoted a great portion of their discussion to biological factors associated with homosexuality. They concluded that biological factors predispose a child to aggression, strength, or weakness. The reactions of other people are assimilated by the child and these influences will have a bearing on the child's personal psychosexual development. The feedback that the child gets throughout his development will be crucial for heterosexual or homosexual adjustment.

Thompson and McCandless (1970) discussed the family and psychosexual development since the purpose of exploring psychosexual development in adult homosexuals was to relate parental influences on the young child to later personality and sexual development. They concluded that warmth and nurturance are crucial in establishing a sexual identity for appropriate sex role adoption in our society. The authors found that dominant factors in the father or absence of a dominant mother are crucial for sexual development in the male. The authors, however, did not conclude that such criteria are necessary for appropriate feminine sexual identity. The authors maintained that a dominant male does not interfere with a female's sex role identification. The

authors suggested that the presence of a dominant father seems to be beneficial for the female since she will learn behaviors that can help her deal with a competitive society. In addition, the authors concluded that the presence of an overly dominant mother in the home can disturb the male's heterosexual adjustment while having no effect on the females' sexual adjustment.

Thompson and McCandless (1970) concluded that sex typical activity is demonstrated on the part of children as early as the second year of life. Males and females reinforce like-sexed peers for behaving in a sex typical way as early as three years of age. This is especially true among boys where males tend to punish other males for behaving in other than appropriate ways for their sex.

Female preschool teachers reward both boys and girls for engaging in feminine types of behavior. McCandless, Cardin, Bush, and Raines (1974) supported the results of these studies. These investigators employed male teachers to work with preschoolers. Their data revealed significant differences in the way that women teachers and male teachers reinforced for sex appropriate behaviors. Female teachers rewarded both male and female children for feminine type activities and male teachers reinforced males for appropriate masculine type of behaviors and females for appropriate feminine type of activities. These findings suggest that adult males in the field of early childhood education may make a contribution to the area of psychosexual development of young males, especially those who come from father-absent backgrounds.

Psychosexual development is different and more complex for men than it is for women. Heterosexual and homosexual females have reported similar types of experiences with their fathers and mothers. No explanation was offered for the lack of differences in the early parental relationships of homosexual and heterosexual females.

In summary, the authors suggested that knowledge of and participation in a homosexual subculture is an important criterion for the formation of a homosexual identity for males. The development of female homosexual identity is not well explained. Individuals with homosexual inclinations who have identified themselves with the homosexual subculture are better adjusted than those who have not. The authors assumed that while homosexuality is still greatly discriminated against in our society, the formation of an integrated homosexual identity supported by similar individuals will lead the homosexual to a greater sense of self-worth and satisfaction.

McCandless and Evans (1973) devoted a large portion of their writing to psychosexual development. The authors maintained that the most important outcome of psychosexual development is learning to live in concordance with one's own sex. This view is consistent with most of McCandless' earlier writings. In this culture females are expected to be expressive, gentle, nurturant, and passive in their social relations, while males are expected to be instrumental, initiative seeking, self-sufficient, and task oriented. These stereotypes shape much of the behavior elicited in our culture. They often operate to deny females competence and males self-expression. Sex stereotypes tend to be difficult on both sexes. The authors stated that those who are appropriately sex typed and sex identified tend to be happier and more successful in this society. They suggested that psychosexual development should lead to "a benign unisex" enabling each sex to keep "the best of its traits," while at the same time learning the best traits of the opposite sex. Males should be instrumental, but they should also be allowed expressive behavior. Females can be expressive, but also allowed (encouraged) to be instrumental. Consequently, females will not be denied competence or males self-expression.

INTELLIGENCE AND METHOD

It was around the concept of intelligence that McCandless made contributions to both research methodology and professional educational practice. A series of articles written and published in the 1950's still have merit for us all as well as for aspirants to the field of psychological and educational research. The most oft-quoted article was written with Charles Spiker as senior author (Spiker & McCandless, 1954), "The Concept of Intelligence and the Philosophy of Science." This was followed shortly by McCandless and Spiker (1956) and by McCandless (1959). A 1952 article based on his address at the 25th anniversary of the Wayne County Training School dealt with "Environment and Intelligence" (McCandless, 1952).

McCandless was a pragmatic environmentalist. He believed that persons working in education and applied psychological fields could have an impact on environmental changes. He believed that these environmental forces could be used to instruct, ameliorate, and shape the behavior of children irrespective of their native endowment. McCandless was certainly one of those who would now be included in the reconciliation of the hereditarians and the environmentalists. Even in his Wayne County address he was trying to develop a reasonable nonpolemic approach to the issue. He did, however, consistently conclude that it is most useful to adopt an environmentalist position as being more compatible with the social values in our culture.

Spiker and McCandless (1954) and McCandless and Spiker (1956) described a methodological frame of reference for child psychology, for the study of intelligence, and for research sharpened through the application of a philosophy of science and for the need for research based on theory. McCandless' own predisposition was to use these concepts in applied work as well—a point which will reappear shortly. Perhaps there is a contribution within these papers to school psychology and early education as well.

The first paragraph of the McCandless and Spiker (1956) paper on experimental research and child psychology is paraphrased below. The phrase "school psychology" is substituted wherever the original authors had written "child psychology." These were points that McCandless frequently discussed while serving in various Division 16 capacities, including a term as that division's president.

From the literature of school psychology, and from discussions with school psychologists throughout the country, the writers have obtained the definite impression that school psychologists are concerned and somewhat troubled about the present and future status of their field. In particular, two deficiencies in the area appear to be arousing consternation. The first concern has to do with an alleged deficiency in the quality and quantity of research conducted by school psychologists, and the second with an alleged lack of interest in theory on the part of school psychologists. The writers agree that these two deficiencies exist. As with child psychologists employers demand more service to clients for the school psychologists and, therefore, little time is left for research. The more important concern for child psychology was that those who were in the profession were not adequately trained in theory and research.

Might the same not be said for school psychologists now?

The close examination of the concept of intelligence by Spiker and McCandless (1954) is still a useful article. The authors pointed out the contradictions of the common sense use of the label with the scientific uses. They described the then, and still, inadequate theory that thinly supports the concept of intelligence. They were especially incisive in demonstrating that there is no circumscribed population of in-

tellectual behavior, nor is there an explicit set of sampling criteria for items used to construct tests of intelligence. Spiker and McCandless made the different levels of meaning ascribed to constructs relevant to those of us who taught individual intelligence testing. They described both the logician's view of a formal definition (Meaning I) and the empiricist's definition concerned with usefulness (Meaning II). Reductionism itself did not escape their pen. The authors clearly showed that many arguments about the validity of intelligence tests were arguments maintained by ignorance of the philosophers' analysis of reductionism. "True intelligence" was exposed for what it is: a scientifically useless phrase that leads to polemics rather than light.

SCHOOLING, CAREGIVING, AND PARENTING

Much of McCandless' concern was with the application of the knowledge of child and developmental psychology to the processes of schooling, caregiving, and parenting. These concerns are reflected in many sources. In the early 1960's with the present senior author, Howard Spicker, Isabel Craig, and the staff of the Clinic Complex at Indiana University, McCandless, at the urging of Ms. McCandless (Elinore), helped generate a proposal to work with 5-year-old psychosocially deprived children. The study was eventually entitled "The Development and Evaluation of a Diagnostically Based Curriculum" and later published as a monograph entitled *Diagnostic Teaching for Preschool Children* (Hodges, McCandless, & Spicker, 1971).

The study was designed with a pilot study begun in the spring of 1964 and three replications for each of the next three years. The children in the experimental preschool group were 5-year-old children who scored within the range of 50-80 on the Stanford-Binet. Comparison children consisted of a stay-at-home group and a regular kindergarten group constituted by us in a nearby community. The stay-at-home comparison children and the experimental kindergarten groups were there because of random selection. The regular kindergarten children were a group constituted to match as closely as possible the other two groups on age, sex, and IQ.

McCandless taught us much about child development, testing, diagnosis, and theory application during those four years. Weekly meetings with the experimental teachers, graduate students, and staff of the project were always a grand mixture of theory and practical suggestions. We sought male students, used ourselves, and hired male bus drivers and assistant teachers in order to provide models for the children that were not available to them normally. These efforts were based on McCandless' continual concern for strong sex-role development. This worked both ways. McCandless was not interested in perpetuating the stereotypic roles of the sexes, but rather was insistent that both boys and girls be given opportunities to learn different behaviors. The "Muscle Club" that he created to bolster self-confidence, he insisted, be open to both girls and boys.

During the course of this study both McCandless and Hodges were involved in the school psychology training program at Indiana University supported by the National Institute of Mental Health. School psychology trainees were involved in many ways with the project and the natural relations between early education and school psychology became apparent to both Hodges and McCandless. Shortly after the project ended, McCandless moved to Emory and Hodges to Little Rock. Both were in the process of bringing their school psychology focus to bear on the preschool and primary child. Hodges didn't know it at the time, but his experience with McCandless and with the

youngsters and teachers in their project had changed his formal allegiance from school psychology to early education and development.

In Atlanta, McCandless became even more involved in early learning, preschools, day care, and parenting. He helped to generate a day care corporation which he hoped would intimately involve families in the creation of positive environments for children. His influence was much in evidence in the early years of that corporation. He wrote a beautiful, theoretically sound, but highly pragmatic, infant curriculum. He observed children and discussed programs with teachers and directors. With Ayse Cardin, Carol Bush, and Steve Raines he developed the "Male Caregivers in Day Care Demonstration Project," which was supported by the Office of Child Development (McCandless, Cardin, Bush, & Raines, 1974).

McCandless had modest expectations from this study, but it did follow career-long interests in sex-typing, sex-role identification, and the role of male models in the socialization of both boys and girls.

Another school-related project that concerned McCandless and his colleague at Emory, Howard Rollins, was the Project Success Environment conducted in the Atlanta Public Schools. This project has, with considerable success (no pun intended), employed reinforcement techniques in aiding the performance of young children in regular classrooms. But McCandless was never quite comfortable with behavior modification *per se* and rarely discussed contingent reinforcement without suggesting that noncontingent, unconditional reinforcement was equally important—the former for directed learning, the latter for communicating human love and affection.

Essays written to various publics are not uncommon in a collection of McCandless' papers. These had to do mainly with parenting, caregiving, and teaching. "Shall Preschoolers Read or Play?" (Hodges and McCandless, 1965) and "Should A Bright Child Start to School Before He's Five?" (McCandless, 1957) are two examples. These papers are illustrative of McCandless' use of empirical data and theoretical principles in helping parents and others with basic decisions. The answers to both the questions are, of course, "It depends!" The clear answers as to what it depends upon were the strength of McCandless' responses to these typically difficult questions.

McCandless believed that the role of psychology in the schools was in preservice teacher training (he went to Indiana and to Emory to be on education faculties), in-service teacher training, and as participant-observers in the classroom and on the playground. The latter role was the one that McCandless thought particularly appropriate for the school psychologist. His basic idea was that you observed and then you tried out, through active participation, the suggestions to be made to your teacher-colleague. School psychologists' goals should be to help develop a working-living environment which included an ideal mixture of the following characteristics: (1) warmth and child orientation, (2) task orientation, (3) fairness, (4) positive management, (5) good humor, and (6) reciprocal interchanges.

McCandless also believed that the school psychologist was the one person who could provide reinforcement and support for teachers who, he said, needed them just as much, if not more, than the children.

ADVICE TO SCHOOL PSYCHOLOGISTS

McCandless' career included the years when the study of children and the national sensitivity to the importance of early socialization experiences became the concern of

much public policy debate. His broad-ranging interests, his varied research, his commitment to both scholarship and practical application, and his keen sense of the significant make his writings a fruitful source for finding direction for school psychology. He was both an academician as a general developmental psychologist and a practitioner as a school psychologist in much of his behavior. He was forever helping to reconcile the divisiveness engendered by the apparently different goals of the scholar and the practitioner. Such a person is never quite at ease in either domain, but, fortunately, these bridge-building persons leave us much upon which to base our work.

The kind of advice to school psychologists that we believe emanates from a careful study of McCandless' work is summarized as follows.

McCandless had a firm conviction in the two-stage theory of adult-child relationships. The first stage was to establish a benevolent dictatorship and gradually work toward a democratic republic. It was not always so. But he was convinced of the need early in his career at the Wayne County Training School when a group of cottage children began to take advantage of his democratic leadership. McCandless had just recently been one of the participants in the Lewin, Lippitt, and White (1939) study of democratic, authoritarian, and laissez-faire regimes. McCandless resolved the crisis by putting the leader of his group over his knee and spanking him soundly. He frequently used this story in writing and speaking to illustrate the principles of firmness mixed with benevolence and concern, but not paternalism, in adult-child relations. It seems that his own discovery of these relationship principles were what caused him to be so attuned to, and intrigued by, Diana Baumrind's description of the "authoritative" parent.

McCandless' writings impress the three of us reviewing his work with the pervasiveness of his concern with the underprivileged. Social class was a major concern both personally and professionally. He worked assiduously toward the goal of equality for any of the underdogs of society and indeed of the world within his purview. One of the better statements concerning schooling and social class is found in Chapter 14 of *Children* (1967), entitled "The Middle Class Teacher and the Every Class Child." McCandless consistently looked for and found the strengths of those who were labeled as culturally different, culturally deprived, or lower class.

A third theme that is instructive is McCandless' concern with what the authors consider to be the microecology of human development, the molecular interactions, the specifics of human exchange as these relate to change, growth, and learning. In our development of the diagnostically based curriculum at Indiana University, he consistently contributed detailed suggestions for ways in which the teachers could convey warmth, empathy, and genuineness (the more molar behaviors which are so frequently demanded of teachers, but so seldom supported by precise definition).

School psychologists should be concerned with the minutia of adult-child interactions when considering both parents' and teachers' interactions with children. McCandless is impressive throughout his writing in the degree to which specific units of a behavioral style of relationship can be discerned.

School psychology, in McCandless' view, should be deeply imbedded in developmental theory and the empirical research of child development and developmental psychology in addition to its deep tradition based on psychometric theory and deviant or different behaviors among children. McCandless never suggested that either of those parts of the foundations were unimportant, but rather that school psychology, like child psychology before it, had strayed from the broader theoretical bases from which strength could be drawn.

School psychology should be the foremost leader in empirical research and evaluation of school programs among those professions in constant intercourse with schools. McCandless demonstrated well the direct relation of empirical research and practical schooling-related problems. His work with the Indiana Preschool Project (Hodges, McCandless, & Spicker, 1971), the Male Caregivers in Day Care: Demonstration Project (McCandless, Cardin, Bush, & Raines, 1974), and the Project-Success Environment are only three among many empirically oriented examples that yielded much concerning the processes of schooling with young children.

Schooling is only as effective as the parenting which has preceded entry into the larger institution. This statement leads to the suggestion, quite naturally, that school psychology, to be maximally effective, should bifurcate its focus. On one side school psychologists should be intimately involved with early education and preschool experiences, especially as these can lead to contact with parents. On the other side, school psychologists should be involved with the development of effective ways to prepare teenagers for parenthood. McCandless' concern with socialization and sex-role typing are important concerns leading to this conclusion.

There are, we are convinced, many other themes that can instruct us from the life of Boyd R. McCandless. The sample we have collected here has been a labor of love. It has benefited us immensely. We trust that you, too, will find insight and encouragement in the always difficult task of helping the young become socialized into a complex society.

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